The terrible effects of carelessness are too apparent when steam boilers explode, and blow to the four winds of heaven all that a man has been able to accumulate in a lifetime of hard labor. See to it, then, you manufacturers, and you, engineers! that there are ne half-way measures adopted; that no 'penny wise and pound foolish' policy prevails; keep the boilers in the best possible repair and condition; buy none but the best fuel; hire only capable, con scientious, and sober men to oversee them ; and the rate of insurance will be lower, higher profits will accrue, and steam power be rendered what in fact it is-an energetic, easily-managed, and economical servant.

## REGENT AMERICAN PATENTS.

The following are some of the most important improvementsfor which Latters Patent were issued from the United States Patent Office last week. The claims may be found in the official list :-
Port Stopper.-The immense weight of which it is necessary to make the port stoppers of iron clad, turreted, or other vessels intended to be invulnerable, to give them the requisite power of resistance to projectiles, $\mathrm{h}_{\star} \mathrm{s}$ rendered them, as hitherto applied, extremely difficult of operation, owing to the great amount of power required to move them : and the methods of applying them hitherto adopted have rendered them liable to be so bound or disarranged by the blow of a shot as to render it impossible to operate them. The object of this invention is to obtain for a port stopper the requisite power of resistance, and yet enable it to be worked by the application of a very small amount of power, and to preventits being seriously bound or obstructedis its action by any displacement or disarrangement which is likely to be produced by the blow of a projectile. With a view to accomplish the above ob ject, this invention consists in the construction of the stopper in the form of a crank; also its arrangement to turn about an upright or nearly upight axis situated some distance within or behind and opposite, or nearly so, to the center of the port or embrasure; and further in the attachment of the bearings in which the journale or pivots of the port stopper turn, to supports which are detached from the wall of the turret or other defensive structure in the immediate neighborhood of the port. Juhn Eric ssun, of New York city, is the inventor of this improvement.

Registering Marine Log.-The object of this invention is to register the dicection of the distances run by a thip or other vessel, as well as the distances themselves; and to this end it consisti in the combination with an apparatus substantially like what has been heretofore known as the registering marine log, or "patent log" of a compass of peculiar construction, and an apparatus convected with the re gistering mechanism for dropping pellets into a compartment of the said comp.ass wheuever a certain distance has been mado by the vessel to which the log is applied. Alexander Gordon, of New York city, is theinventor of this improvement.

Muchine for Exercising the Muman Body.-The object of this invention is to obtain a simple and cfficient machine for exercising certain portions or members of the human body, designed more especially for the benefit of persons afflicted with dyspepsia, liver com plaint, \&c. The invention consists in the employment or use of a lounge provided with an adjustable section for the purpose of adjusting the patient in the proper and desired position, and using in con nection with said lounge a pair of reciprocating pads arranged aud operated in such a manner as to effect the desired end. Dr. Charles F. Taylor, of No. 159 Fifth Avenue, New York, is the inventor of this improvement.
Brewing With Murze.-It is understood by persons that in order to effect the dissolution and saccharifi cation of barley-malt, a temperature of about $160^{\circ}$ to $168^{\circ}$ Fah. is required, and that when the tempera ture exceeds 1700 the saccharifying property of the malt is killed and the malt is reudered useless. The starch of Indian corn or maize, bowever, cannot be perfectly dissolved at a temperature lower than that of boiling water, and the attempts heretofore made to treat barley malt and maizs mixed together in the $s$ we $m$ ish tub have filed, becauso the temperature
required for the saccharification of the malt is not high enough to dissolve the starch of the corn, and very little benefit is derived from the use of the corn; or if the temperature is raised high enough to dissolve the starch of the corn, the barley malt is killed and the whole process is a failure. 'These difficulties are overcome by the present invention, which consists in disclosing the starch of Indian corn and preparing the saccharified extract from corn mixed with barley malt, all in one and the same vescel, simply by sacrificing a small quantity of barley malt, or if desired the process may be executed in different vessels, and from 40 to 50 per cent of corn can there by be mixed with barley malt, and great economy effected in brewing malt liquors. Ludwig Haecker, of Altenburg, in the Kingdom of Hungary, is the inventor of this improvement, and further information may be obtained of Escher \& Co., 9 Murray street, New York

pring rigidy autached to it as described the swivel or link,
f, provided with notches for the sere to hoid the hammer at full 0 r $\underset{\substack{\text { f, pron } \\ \text { alf col } \\ \text { Clai }}}{\substack{\text { chen }}}$
〔0,810.-Railroad Journal Box.-O. Beecher \& R. E. R•g. ers. Philadelphia, Pa.:


 "nrpise speeified.



10,811.-Soda Water Apparatus.-J. H. Blaisdell, Boston, $\underset{\text { Iclaimina }}{\text { Mas. }}$
vid hin annt a soda apparatus the arrangement of one outlel for sod




 lially s. set forth.

 to, 812 - - Harvester.-Virgil W. Bla nchard, Bridport, Vt.:
 .nnected therewith for the purpose of wiresing he speed on the set forth

 nickle, or causinp
is herein eeverth
Ther



ingoosition. .ihe connecting of the ylindrical pin, w, to the tever, 1


 cribed.
[The object of this invention is to obtain a grain and grass barvester which will be of light draught, admit of having a more or less rapid novement communicated to its'sickle as oecasion may require be
durable, free from allj unnecessary friction in the operation of its durable, free from alljunnecessary friction in the operation of it
vorking parts, and admit of having its finger bar adjus ed with the working parts, and admit of having its finger bar adjusted with the
greatest facility so as to clear obstructions which may lie in its path 40,813 - Railwav Corriage.--Naium Franklin Bryant, East Boston, Mass.:


 trowe t.and packing, w. tine ecumpass the sliding box, in mamile
 wheel chansitits track to either of two tracks of difterent gages.
40,814. - Channeling. Tool_-Albert Bottum, Bridgepert, Conn.:
I claun he
 form substantialy as hereing specilitica.
[This invention consists in the combination of a straght cutter and an are formed cutter so arranged relatively to each other, that while he first cuts a score in the she or other article the other cuts fiom within the said soore a strip whose transverse section is of semi-cir-
cular or segmental form, thus producing a semi-circular or segneat cular or segmental form,
shaped covered chanvel.]
40,815.-Machine for making Nuts.-Orin C. Burdict, New Haven, Conn.:
 and he said two parts combined with movanie panch, atid
fixed punch, $\mathbf{N}$, to operate in the manner and for the purpuse specified. The combination of the sleere, i, punches, L and $N$, when
second, Then
the same ate arranged in the manner descrihed and cumbine 1 with a the same ate arranged in the manner descrined and
die constructed as and for the purpose specified.
40,816.-Feeding Device for Saw Mills.-Victor H. Busch
mann, Baltimere, Md: mann, Baltimore, Md.:
I claim, first, Applying the reqnired pressure to the feed and guide
rollers. by means of a single force acting equally upon opposite side Tllers. by meang of a single force acting equally upon opposite sides
of both roller carrying fames. by mechanism constructed and operating substantially as described
Second, Hanging or supporting the roller carrying frames con
sruucted a descried in such manner that while they will alway sructed asdescribed in such manner that while they will always
preserve their paralieliam to each other they are allowed to yitld
equallv on each sident a centralline and accommedale equallo on each sident a centratine and accommodate themselve
to hoards or different thicknesses. suns:antially as describe d. Third, The use of adinstable bearings, i, or their equivalunts, in
combination with the roller frames, b b, and pressure plates, $g$, con combination wit hthe roller frames,, b, and pressure phates, $g$, enn.
structed and operating substantialls as and fur the purposes de seribed. A central weight or other similar force in combination
Fourth,
with a guide applied and operatug substantially as and for the pur with a guide app.
poses described.
40,817.-Construction of Buggies.-Jonathan H. Byc, Sterling, Ill.
I claim, firss, The combinatiou of the thills, a a, with the spings
b and c c in: the purpose and in the manner herein described. Sp cond, The combination of the coupting, $m m$, with the reat
springs, s and $r$ r $r$ the curved continuation, in on of the eniplint.

40,818.-Filter.-Anthony Chabot. San Francisco, Cal.: I claim, first. Combining oneormore pornus tubes with a pipe, B
by means of a flange, a, on the pipe for the reception of one end of ach tabe, a cap. C. ior't he reception of the cther endand a bolt, $D$ uhstantially as herein described.
Second. In a filtering apparatus constracted subtanially as speci-
fied, I claim the herein described arrangement of chambers and pass
 flow of water through them without reyersing or changing the posi
tion of the filter or filters.

